

What is claimed is:

1 1. A high voltage rechargeable electrochemical energy storage
2 system structure comprising an electrical series arrangement of
3 a plurality of individual rechargeable electrochemical cells,
4 each cell comprising a pair of opposed polarity electrode
5 members and a separator member providing an electrolyte
6 interposed between said electrode members, where said structure
7 is arranged such that:

8 an electrode member of first polarity of a first cell is
9 adjacent an electrode member of second polarity of a second
10 cell;

11 an electrically conductive divider member is interposed
12 contiguously between said electrode member of said first cell
13 and said electrode member of said second cell;

14 said plurality of cells is enveloped within a casing; and
15 said divider member is affixed to said casing and forms
16 therewith a seal isolating ionically each cell from the other
17 cells.

1 2. A structure according to claim 1 wherein
2 said casing comprises electrically insulating material; and
3 said structure further includes means for communicating
4 electrically between at least one electrode member and the
5 exterior of said casing material.

1 3. A structure according to claim 2 wherein said means for
2 communicating comprises an opening in said casing material
3 through which said electrode member may be accessed.

1 4. A structure according to claim 2 wherein said means for
2 communicating comprises
3 an electrically conductive contact member in circuit with
4 said electrode member; and
5 an opening in said casing material through which said
6 contact member may be accessed.

1 5. A structure according to claim 1 wherein
2 said casing comprises electrically conductive material; and
3 said structure includes means for electrically insulating
4 said divider member from said conductive casing material.

1 6. A structure according to claim 5 wherein
2 said casing comprises a first electrically conductive casing
3 member in circuit with an electrode member of first polarity of
4 a first cell and a second electrically conductive casing member
5 in circuit with an electrode member of second polarity of a
6 second cell; and
7 said structure comprises means for providing electrical
8 insulation between said first and second casing members.